Local Resource Management Scorecard

Rylee Main, Project Manager

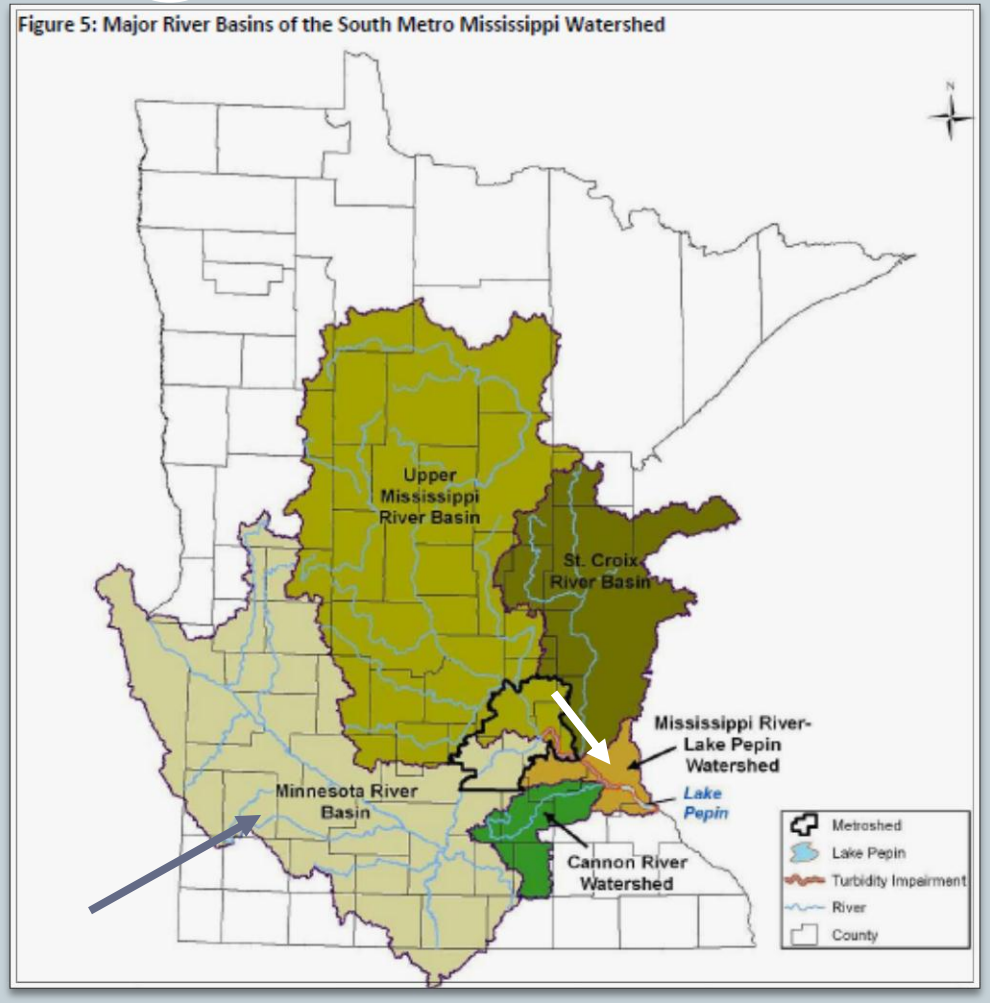
April 26th, 2013

Mission

ENCOURAGE PRACTICES WHICH WILL REDUCE THE SEDIMENT LOAD ENTERING LAKE PEPIN

Lake Pepin Drainage Area

- Drainage area covers half of Minnesota
- Minnesota River Basin contributes 75% of the sediment settling in Lake Pepin
- Minnesota River Basin covers 37 counties across the state.



Local Resource Management Scorecard

Credit

Local conditions

Unreported projects

Dissemination of information

Accountability

Side-by-side comparisons

Accomplishments

Water Plans

Coordination

County Profiles: Part 1

Baseline Conditions

Landscape
Watersheds
Rapid Watershed Assessments
Highly Erodible Land
Shoreland
Cultivated Land
Crops

Expected Changes
State and Federal Programs

County Ordinances
Shoreland Protection
Soil Limit Loss

County Profile: part 2

Plans and Projects

Shoreland Protection

Redetermination of Benefits

Conservation Drainage

Conservation Land Use

Water Storage

Coordination

Data Sources for Graphs, Statistics, etc.

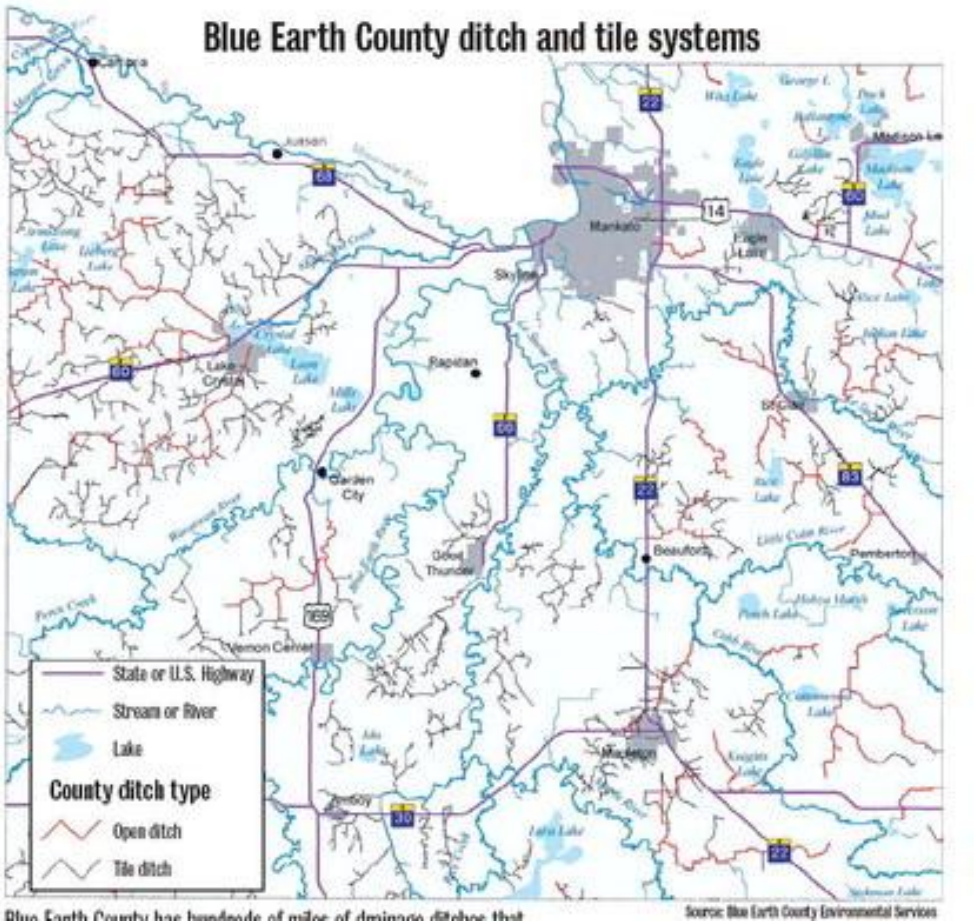
- **USDA Natural Resources Conservation Service (NRCS) , Rapid Watershed Assessments**
  - ✓ Watershed acreage per county
- **Minnesota Board of Water and Soil Resources (BWSR)**
  - ✓ County size
  - ✓ Riparian land (size, cultivation, CRP coverage)
  - ✓ RIM, WRP, and RIM-WRP acreage
  - ✓ Ditch miles, buffer strips, and enforcement actions
- **USDA Ag Census**
  - ✓ Farm size and farmer demographics
  - ✓ CRP and CREP acreage, funding, and contracts
- **Minnesota River Basin Data Center, Tillage Transect Survey**
  - ✓ Crop types and acreage
  - ✓ Conservation tillage (practice types, acreage)
- **Individual County and SWCD Websites**
  - ✓ Water planning staff, contact information, water plans, county ordinances, etc.

What have we done with the data?

- **Numerical Description**
  - Taking a current snapshot of crops, program funding, etc.
  - Calculated basic statistics (e.g., averages, percentages) for cross-county comparisons for a variety of metrics
- **Visual Presentation**
  - Creating graphs using STATA statistical software for faster, more intuitive data comparisons within the Scorecard
- **Further Analysis?**
  - More sophisticated statistical analysis techniques possible (e.g., correlations, trends over time, etc.)
  - Additional metrics/variables will expand the potential for analysis and comparisons
  - Dependent upon the Scorecard's future scope and expansion

➢ *To be conducted for each county and for the aggregate of all counties, which allows for comparison of an individual county against the aggregate average*

Blue Earth County



Landscape and Expected Changes

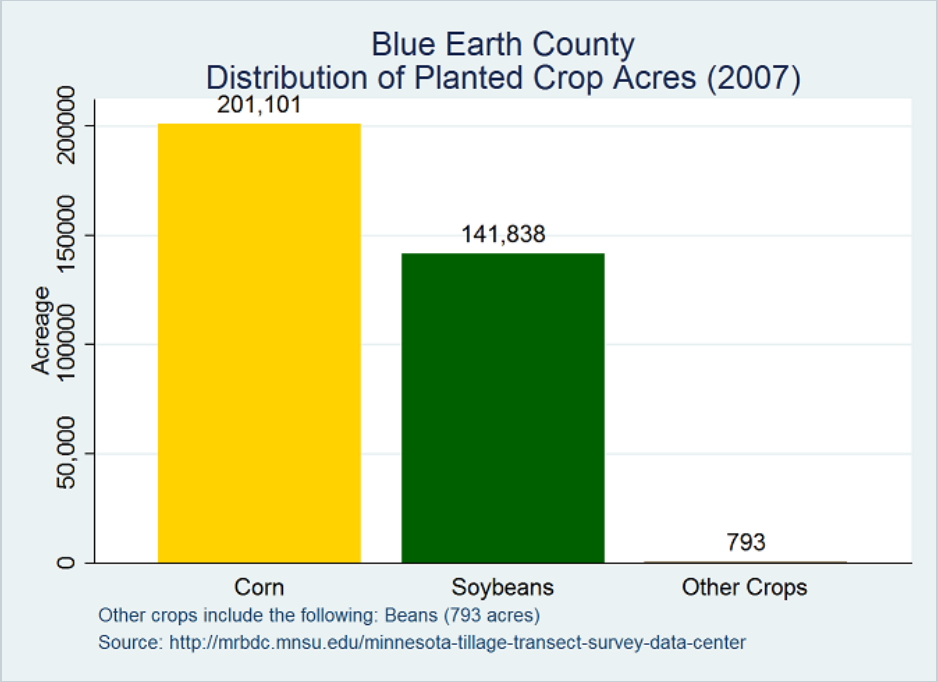
Landscape

River Miles: 368

Public Ditch Miles: 704

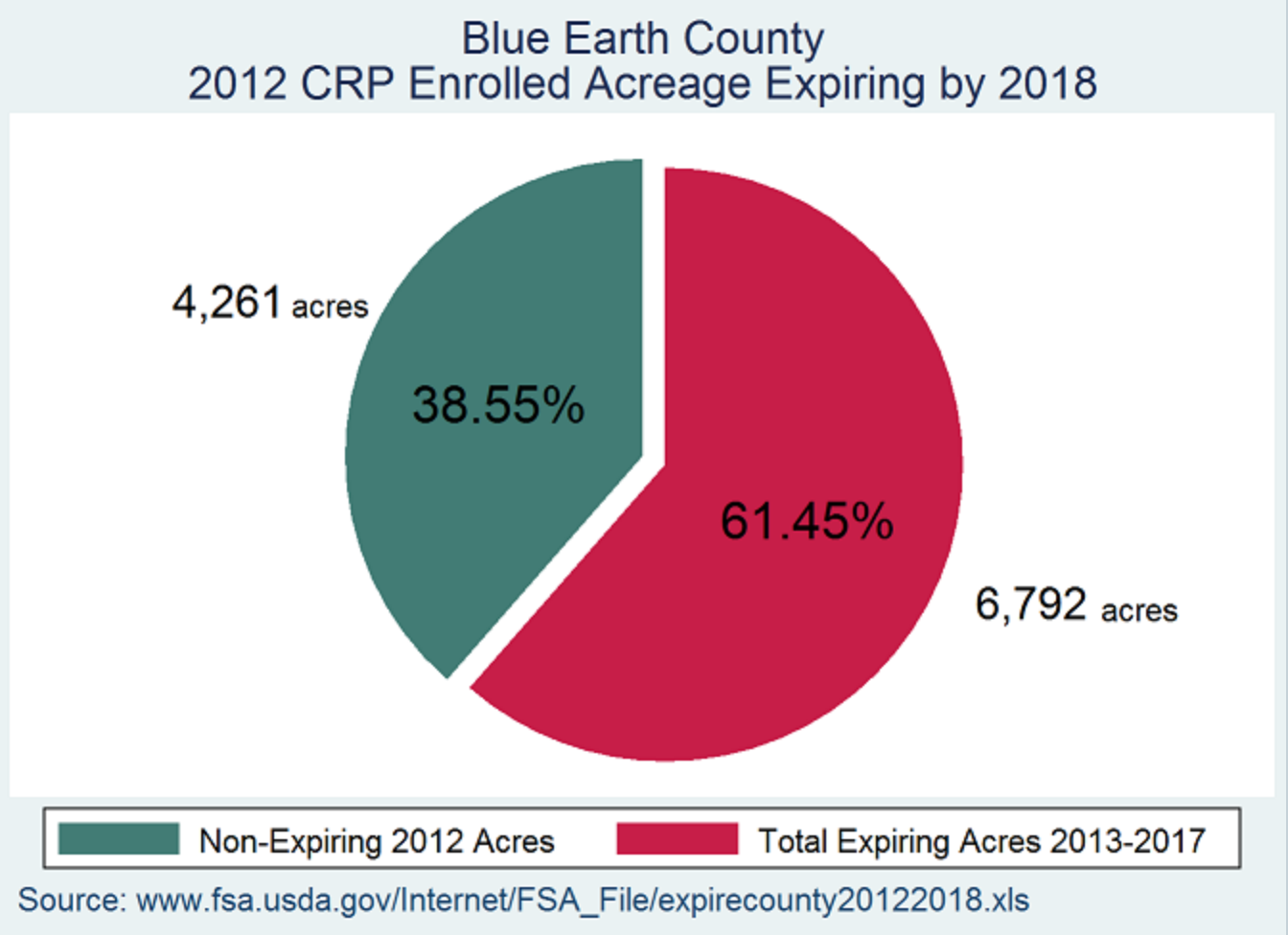
Shoreland Acres required to have 50 foot buffer: 6,970.

Shoreland Acres *out of compliance* with 50 foot buffer as of 2011: 386



Other features included in this section: land use, highly erodible land, soil type, cultivated riparian acres, and riparian acres enrolled in CRP

Landscape and Expected Changes

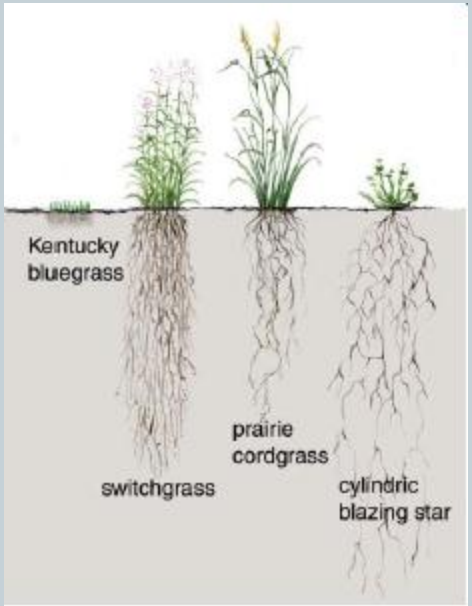


Shoreland Protection

As of 2012, Blue Earth County notified 289 of the approximately 400 landowners out of compliance with the 50 foot shoreland buffer requirement.

- 200 landowners contacted the SWCD for assistance.
- 22 plan on or have already signed up for CRP
- 126 are planting buffers at their own expense
  - Boundaries have been marked at 97 of the 120 sites
  - 26 more boundaries are scheduled to be marked in Spring 2013
  - 3 landowners are measuring and planting the buffers on their own
- 21 landowners either submitted RIM Buffer Conservation Easement Applications, or are interested in the next signup
- 10 have refused
- 17 are undecided on CRP vs. planting at their own expense

Approximately 1% of field being taken out of production on average.

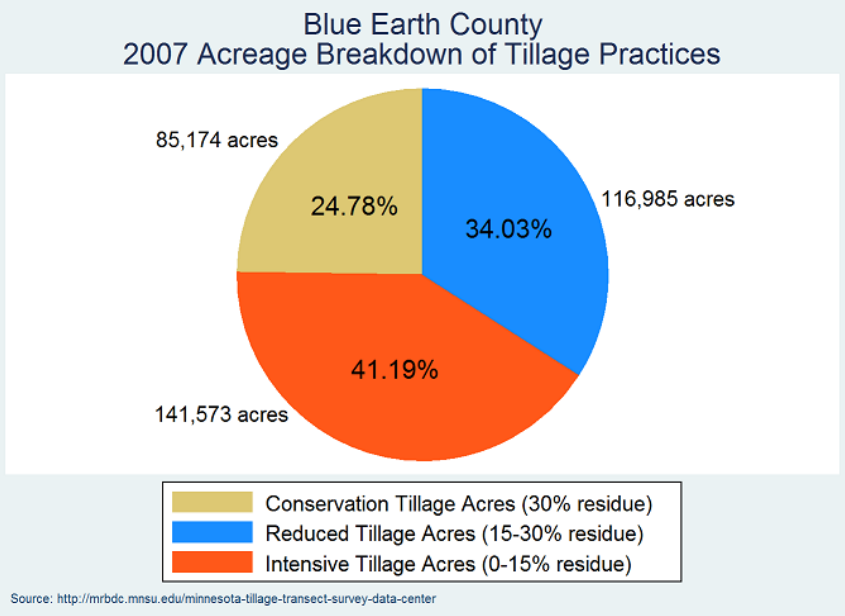


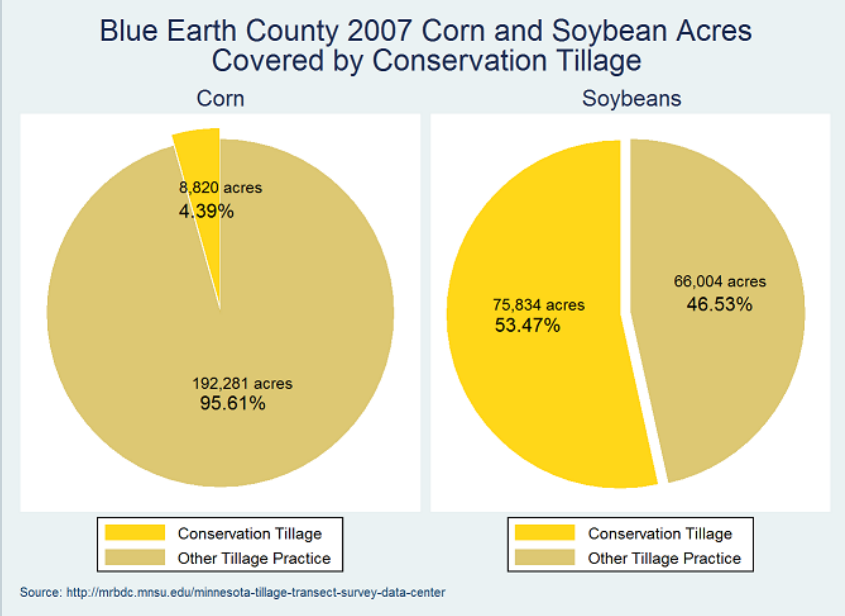
Native grasses, unlike turf grass (Kentucky bluegrass), intercept runoff and have long roots to encourage infiltration, minimize erosion, and stabilize streambanks.

Conservation Drainage: Ditch 57

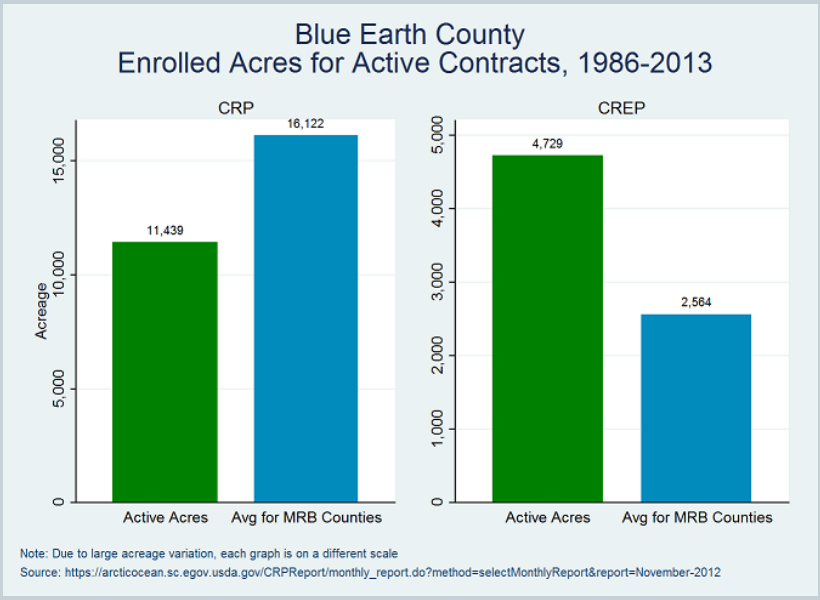
- Ditch 57 needed an entire system upgrade.
- Landowners downstream were hesitant to an upgrade as channel improvements could increase flow, resulting in greater potential for flooding.
- The county pursued a goal of no net increase in flow within the channel.
- Downstream landowners were in favor of upstream water storage, as it would reduce flood risk.
- Cost-share dollars were available to landowners if they implemented water quality improvements in addition to channel maintenance.
- Landowners decided to include water quality projects in the system upgrade.
- Landowners paid approximately 10% of the construction costs.
- As of 2012, the county achieved no net flow increase in the ditch, through strategic water storage efforts, including over-dug ditches, storage ponds, and buffer strips.

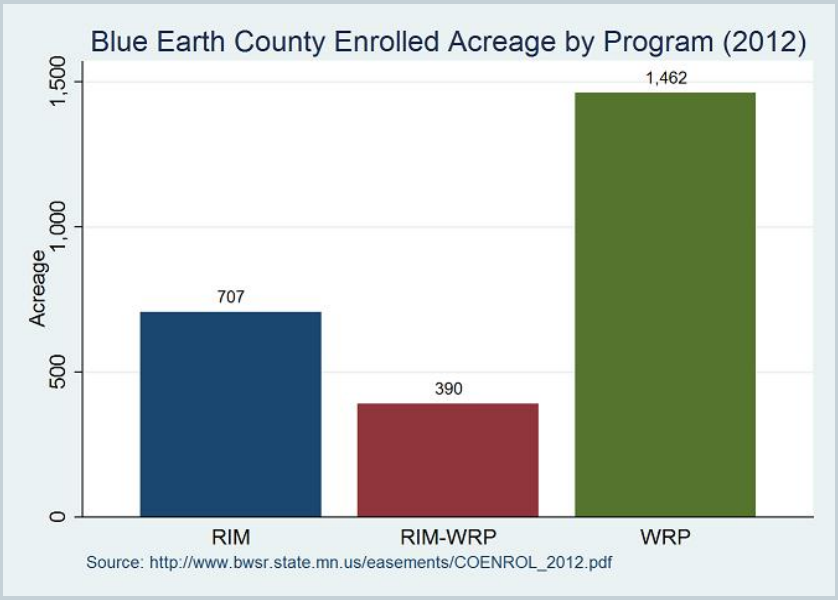
Conservation Land Use





State and Federal Programs





What's Next?

LOCAL RESOURCE MANAGEMENT SCORECARD

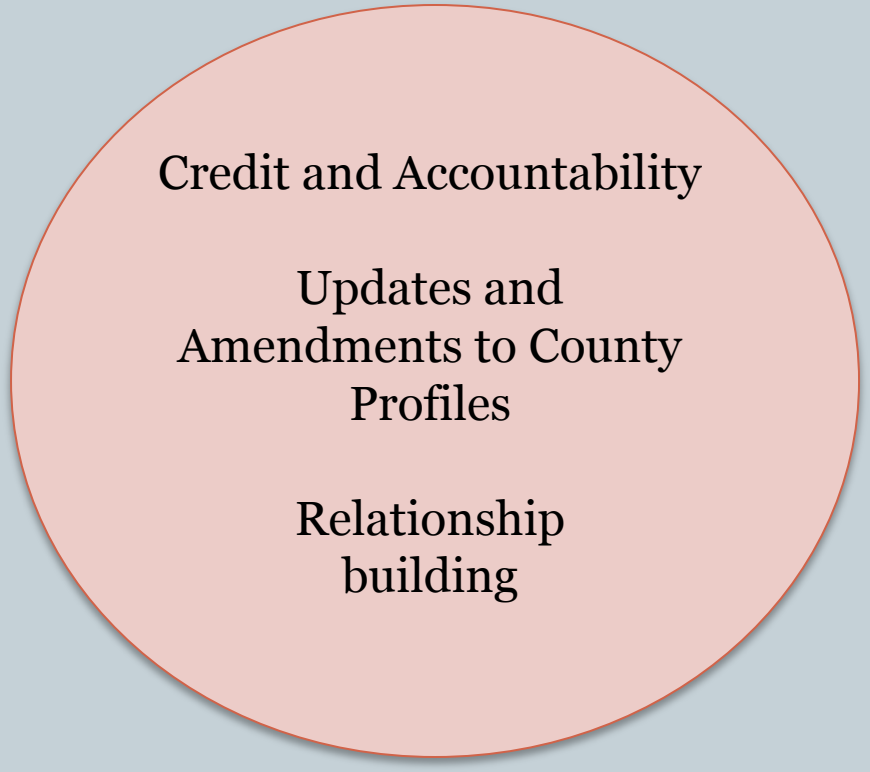
PHASE II

Advisory Board

Deborah Swackhamer
Professor, U of M; Co-Director, Water Resources Center
Steve Woods
Assistant Director, Board of Water and Soil Resources
Kris Sigford
Water Quality Director, MN Center for Environmental Advocacy
Shannon Fisher
Executive Director, Minnesota River Board
Scott Sparlin
Executive Director, Center for a Clean MN River
Beth Kallestad
Executive Director, Cannon River Watershed Partnership
Harlen Madsen
Kandiyohi County Commissioner
Kathryn Kelly
Renville County SWCD Supervisor
Jason Beckler
Renville County SWCD Technician

Interviews

- Obstacles
  - Funding
  - Technical
  - Political
  - Organizational
- Coordination
  - Strength
  - Type
  - Changes
- Perceived Role
  - Attitude



Objective

SUPPORT AND ENHANCE LOCAL CAPACITY TO ADDRESS SEDIMENTATION IN THE MINNESOTA RIVER BASIN

Questions?

www.lakepepinlegacyalliance.org

CONTACT: RYLEE MAIN
RYLEE.MAIN@LAKEPEPINLEGACYALLIANCE.COM
630-806-9909